

MASTER LATEX STYRENE BUTADIENE LATEX

DESCRIPTION

MASTER LATEX is a single component emulsion of styrene butadiene co-polymer based latex, specially developed to improve the properties of cementitious compositions. **MASTER LATEX** when used in combination with standard quality of ordinary Portland cement enhances the mechanical properties such as bonding (adhesion) with various building materials, flexurals, compression and impact strength. **MASTER LATEX** improves the thin section fragility of cement when used as coating. It is resistant to hydrolysis hence can be used for external applications too.

TECHNICAL INFORMATION

CHARACTERISTICS

- Appearance : Single component, milky white pourable liquid
- pH value at 30^o C : 7.5 to 11
- Viscosity on Fond cup B-4 : 100 CPS Max.
At 30^oC : Viscometer spindle 1.12 R.P.M at 250C
- Solids % : 44 to 50
- Specific Gravity : 0.99 to 1.03
- Durability with water : Dilutable in any proportion
(As per application)
- Mechanical Stability : Good
- Compatibility : Compatible with cement & concrete admixtures
- Storage Stability : Excellent
- Toxicity : Non – Toxic

ADVANTAGES

- Increases flexural and tensile strength
- Compressive strength is comparable with concrete
- Reduced shrinkage, water permeability
- Good bonding between old & new concrete
- High strength mortar with good resilience
- Durable structural repairs, restoration & waterproofing
- Improved abrasion resistant flooring

FEATURES

- Simple to use as it is a single component.
- Cures to a hard, tough & wear resistant surface.
- Bonds (adheres) strongly to most surface types.
- Can be applied to a uniform thickness coating on horizontal and vertical surfaces.

MASTER LATEX STYRENE BUTADIENE LATEX

- Allows trapped water (vapours) to escape and prevents blistering and adhesion failures.
- Makes cement mortar or coating compact which prevents salt penetration into the concrete.
- It is unaffected by UV light and prevents fading of concrete.
- It acts as anti-corrosive for steel. It is highly durable even in continuous contact with water.
- It is resistant to water, dilute acids and alkali solutions.
- It is non-flammable & non-hazardous. Does not evolve toxic gases when exposed to fire
- Non-toxic to human being.
- Most properties improve on ageing
- Resistant to fungus and micro-organism growth.

USAGE

- Waterproofing of building, toilets sunken portion basement.
- Waterproofing of water tanks and swimming pools.
- Repairing of concrete and masonry walls-internal, external & terrace roofs by cement mortars.
- Renovation and protection of concrete against corrosion and salt petrel
- As a bonding agent for old concrete to new concrete, industrial floor or floor duct nosing repair.

SURFACE PREPARATION

- Surface preparation is the most important step before application to achieve desired results and avoid failures.
- The surface should be absolutely dry, free from dust coatings, loose particles, fungus, moss, oils, greases, mould-release agents & dirt. Clean the surface by scrapping & sand blasting to remove dirt & loose particles.
- Treat surface with 5%-10% hydrochloric acid, followed by complete neutralization with water, which will improve bonding of the coating. Oils, greases & mould-release agents can be cleaned with solvents.

DIRECTION FOR USE

1) AS A BOND COAT

Plaster to Plaster, Concrete to concrete, Plaster over brick masonry in the ratio of 1:4:7 (Master Latex : water : cement) Prior to mixing prepare a mix of Latex and water and add cement to it.

2) FOR WATERPROOFING

2 coats with the ratio of 1:4:7 to be applied with an interval of 6-7 Hrs.

MASTER LATEX STYRENE BUTADIENE LATEX

MASTER LATEX is first separately diluted with water by adding water to Master Latex. The diluted Master Latex is then added into the mixture & homogenized.

a) METHOD

1. On a clean & well prepared surface apply Master Latex cement slurry (Master Latex : Cement: 1: 1 Part by weight).
2. Apply Master Latex mortar by trowel to achieve uniform & smooth finish. Application of Master Latex modified mortar should be very fast as it cures fast.
3. Moist cure for 24 hours & then allow it to cure

b) PREPARATION OF MORTAR

Cement	: 1.00 Kg
Sand	: 2.50 Kg
Water	: 0.16 Kg
MASTER LATEX	: 0.20 Kg
DEFOAMER (if required)	: SILICONE TYPE (Dosage as per requirement)

- Deformers of silicone type (proprietary products) can be used but dosage depends upon the method of mixing & manufacturers recommendations. Adjust quality of water for workability if required. Do not add excess water.
- Increase the proportion of MASTER LATEX for more demanding situations.

SPECIFICATIONS

STRUCTURE REPAIR

- a) Remove all sealed / loose concrete to reach up to the concrete or reinforced structure and remove all loose dust by means of wire brush.
- b) Remove all dust particles by means of high jet water.
- c) Apply one coat of **MASTER LATEX** with cement (Ratio of **MASTER LATEX** : cement :1:1 PBW) on cleaned reinforcement & allow to dry for 2 - 3 hrs. Coverage: 60 + 5 sq.ft. / Liter / coat
- d) Apply **MASTER LATEX** coat i.e. mixture of cement: Master Latex (1:1 by PBW) on entire surface. Allow it to dry for 1-2 hrs. Coverage: 30 + 5 sq.ft. / lit / coat.
- e) Now prepare polymer modified mortar as given below and apply it on entire concrete substrate at 10mm or 20mm thickness as required.
Cement : 50 Kg
Sand : 125 Kg
Water : 8-10 Kg.
MASTER LATEX : 8-10 Kg.
Apply above polymer mortar by hand pressing over tacky **MASTER LATEX**
- f) Allow to cure above polymer mortar for one day.

MASTER LATEX STYRENE BUTADIENE LATEX

CURING

Moisture cure for 24 hours allow to dry out

CLEANING

Tools & equipment's should be cleaned with water immediately after use.

SHELF LIFE

24 months from the date of manufacture.
Shake well before using after prolonged storage

PACKING

1 Liter, 5 Liters, 20 Liters, 200 Liters plastic container